

(FILE 'HOME' ENTERED AT 08:37:41 ON 25 SEP 2003)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE' ENTERED AT 08:38:02 ON 25 SEP 2003

L1	2760 S BDNA OR BRANCHED DNA
L2	991 S L1 AND (IMPROV? OR INCREASE? OR SENSITIVITY? OR ADVANTAG?)
L3	388 DUP REM L2 (603 DUPLICATES REMOVED)
L4	56 S L3 AND HYBRIDI?

L4 ANSWER 49 OF 56 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:5411 CAPLUS

DOCUMENT NUMBER: 130:218783

TITLE: **Branched DNA** signal amplification  
for direct quantitation of nucleic acid sequences in  
clinical specimens

AUTHOR(S): Nolte, Frederick S.

CORPORATE SOURCE: Department of Pathology and Laboratory Medicine, Emory  
University School of Medicine, Atlanta, GA, USA

SOURCE: Advances in Clinical Chemistry (1999), 33, 201-235  
CODEN: ACLCA9; ISSN: 0065-2423

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with .apprx.85 refs. The **branched DNA** (**bdNA**) signal amplification system is a solid-phase, sandwich **hybridization** assay incorporating multiple sets of synthetic oligonucleotide probes and several simultaneous **hybridization** steps. This system is one of several methods that are currently available for quantitation of nucleic acid sequences in clin. specimens. This method have been used to assess rapidly the effect of antiviral therapy, which has both expedited the development of antiviral drugs and **improved** the management of patients with HIV-1 and HCV infections.  
(c) 1999 Academic Press.

REFERENCE COUNT: 87 THERE ARE 87 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ib ab 54

L4 ANSWER 54 OF 56 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:162630 CAPLUS

TITLE: Novel non-nucleosidic phosphoramidites for multiple labeling of oligonucleotides and synthesis of **branched DNA**.

AUTHOR(S): Iyer, R. S.; Su, S.; Inamdar, A.; Kalra, K. L.

CORPORATE SOURCE: BioGenex Laboratories, San Ramon, CA, 94583, USA

SOURCE: Book of Abstracts, 213th ACS National Meeting, San Francisco, April 13-17 (1997), ORGN-368. American Chemical Society: Washington, D. C.  
CODEN: 64AOAA

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB Novel sym. and asym. branching phosphoramidites that can be used to synthesize branched oligonucleotides and to amplify the signal intensity of DNA probes have been developed. The detection **sensitivity** of oligonucleotide probes is **increased** by the introduction of multiple labels such as biotin or fluorescein onto the oligonucleotides. Arranging the labels nonlinearly at the 5'-end of an oligonucleotide chain is particularly desirable as it minimizes steric hindrance and **increases** the detectability of the labels. Branching phosphoramidites that result in the formation of DNA "forks" and "combs" have been used successfully for this purpose. Polylabeled **branched DNA** multimers constructed using these reagents showed significantly **increased** signal intensity relative to singly labeled probes as detd. by in situ **hybridization** and microtiter plate assays.

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